

## **REMARKS**

Applicant respectfully thanks the Examiner for the consideration provided to this application, and respectfully requests reconsideration of this application.

Each of claims 1, 67-70, and 85 has been amended for at least one reason unrelated to patentability, including at least one of to: improve consistency; satisfy stylistic preference; address an informality; explicitly present one or more elements, limitations, phrases, terms, and/or words implicit in the claim as originally written when viewed in light of the specification, thereby not narrowing the scope of the claim; detect infringement more easily; enlarge the scope of infringement; cover different kinds of infringement (direct, indirect, contributory, induced, and/or importation, etc.); expedite the issuance of a claim of particular current licensing interest; to target the claim to a party currently interested in licensing certain embodiments; enlarge the royalty base of the claim; cover a particular product or person in the marketplace; and/or target the claim to a particular industry and/or field of use.

Descriptive support for the amendment to each of claims 1, 67-70, and 85 can be found in the originally-filed application at least at paragraphs 55 and 56.

Claims 1, 15-17, 67-71, 74-76, and 82-88 are now pending in this application. Each of claims 1, 67, 68, 69, 70, and 85 is in independent form.

### **I. The Indefiniteness Rejections**

Numbered paragraph 2 of the present Office Action rejects each of claims 69, 71, 74-76, and 82 under 35 U.S.C. 112, second paragraph, as being indefinite.

Without acquiescing to the present Office Action's position, each of these rejections is respectfully traversed in its entirety as moot in light of the current amendment to the corresponding claim. Consequently, reconsideration and withdrawal of these rejections is respectfully requested.

### **II. The Obviousness Rejections**

Numbered paragraphs 4-6 of the present Office Action rejects each of claims 69, 71, 74-76, and 82 under 35 U.S.C. 103(a) as being obvious over various combinations of U.S. Patent 6,180,562 ("Blum"), U.S. Patent 5,653,054 ("Savignano"), and/or a paper entitled *Effect of*

*Comonomer Hydrophilicity and Ionization on the Lower Critical Solution Temperature of N-Isopropylacrylamide Copolymers* (“Feil”).

Without acquiescing to the present Office Action’s position, each of these rejections is respectfully traversed in its entirety as moot in light of the current amendment to the corresponding claim. Consequently, reconsideration and withdrawal of these rejections is respectfully requested.

Each of independent claims 1, 67-70, and 85, from one of which each of claims 15-17, 71, 74-76, 82-84, and 86-88 ultimately depends states, *inter alia*, yet no substantial evidence has been presented that the applied portions of the cited references teach (i.e., disclose and enable), alone or in combination, “wherein the non-ionic hydrophobic compound (or monomer) comprises acrylonitrile”.

Instead, Blum allegedly asserts “hydrolyzing polyacrylonitrile”. Yet a person having ordinary skill in the art would recognize that “polymerizing at least one non-ionic hydrophobic compound (or monomer), a cross-linker, and non-ionic N-isopropyl acrylamide, wherein the non-ionic hydrophobic compound (or monomer) comprises acrylonitrile” and then “hydrolyzing” the resulting “polymer” would have converted the NIPAM in that polymer to acrylic acid, which would have destroyed the ability of the NIPAM to control the exotherm temperature, and thereby the “polymer” would no longer be able to “release[] heat over a range of dropping ambient temperatures below 0 degrees C”.

Neither Savignano nor Feil cure this deficiency of Blum.

Thus, even if there were proper evidence of obviousness presented in the present Office Action (an assumption that is respectfully traversed), and even if there were a reasonable expectation of success in combining or modifying the applied portions of the references relied upon in the present Office Action (another assumption that is respectfully traversed), no substantial evidence has been presented the applied portions of the references relied upon in the present Office Action, as attempted to be modified and/or combined, expressly or inherently teach every limitation of the independent claims, and consequently the present Office Action fails to establish a *prima facie* case of obviousness. Consequently, for at least the reasons mentioned above, reconsideration and withdrawal of these rejections is respectfully requested.

**CONCLUSION**

It is respectfully submitted that the application is in clear condition for allowance. Reconsideration of the application, withdrawal of all grounds of objection and rejection, and issuance of a Notice of Allowance are earnestly solicited.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. 1.16 or 1.17 to Deposit Account 50-2504. The Examiner is invited to contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

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Respectfully submitted,

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